CLAIMS

1. A concentrator for voice telephones installed in a LAN comprising a LAN switching unit for switching and connecting a plurality of interfaces incorporated, and a plurality of LAN hubs accommodating equipment connected to the LAN switching unit via the interfaces, respectively, and for performing data communication over the LAN, said concentrator comprising a LAN interface connected to the LAN switching unit, and a set or plural sets of voice telephone interfaces connected to one or plurality of voice telephones juxtaposed with the equipment, wherein voice data transmitted and received by the set or plural sets of the voice telephone interfaces are converted into MAC frames of a fixed length, and only the voice data converted into the MAC frames are relayed to the LAN interface side.

2. A concentrator for voice telephones according to Claim 1, wherein a second LAN interface for performing transmission and reception of data between a CPU incorporated therein and the LAN hub is provided in addition to the LAN interface connected to the LAN switching unit.

3. A concentrator for voice telephones according to Claim 1, comprising a function of converting signals from circuits of analog telephone network subscribers into call control protocol according to TCP - IP so as to be able to accommodate the analog telephone subscribers' terminals.

4. A concentrator for voice telephones according to Claim 1, comprising a second LAN interface for performing transmission and reception of data with a CPU incorporated therein, apart from the LAN interface connected to the LAN switching unit, having a function of converting voice data received from the plurality of voice telephones accommodated therein into TCP - IP packets or UDP - IP packets, and

transmitting and receiving the TCP - IP packets or UDP - IP packets via the second LAN interface.

5. A concentrator for voice telephones according to Claim 4, comprising a router connected to the second LAN interface for connecting the second LAN interface to either the outside of the LAN or the LAN hubs at option.

6. A method of communication over a LAN comprising a plurality of LAN hubs accommodating equipment for performing data communication, a plurality of the concentrators for voice telephones according to Claim 1, and a LAN switching unit, having a plurality of ports and for switching and connecting between the plurality of the LAN hubs, and the plurality of the concentrators for voice telephones, wherein call control on one or a plurality of voice telephones incorporated in each of the concentrators for voice telephones is performed by a PC or work station incorporated in each of the LAN hubs.

7. A method of communication over a LAN according to Claim 6, wherein in case that a response from a PC or work station on the call-in side is not obtained by the method of communication over a LAN according to Claim 6, arrival of a call request is notified, and the response is detected by use of control channel signals of a voice telephone interface on the call-in side.

8. A method of communication over a LAN comprising a plurality of the concentrators for voice telephones according to Claim 1, a plurality of LAN hubs accommodating equipment for performing data communication over the LAN, and the LAN switching unit having a plurality of ports, wherein routing of packetized voices for communication by voice telephones between the concentrators for voice telephones is performed by switching

and connecting operation of the LAN switching unit based on the MAC address in a MAC frame in which the packetized voices are assembled.

9. A method of communication over a LAN comprising a plurality of LAN hubs accommodating equipment for performing data communication, a plurality of the concentrators for voice telephones according to Claim 1, and a LAN switching unit, having a plurality of ports and for switching and connecting between the plurality of the LAN hubs and the plurality of the concentrators for voice telephones, wherein voice data transmitted and received by the voice telephones are packetized for communication over the LAN by applying a frame having a function of absorbing fluctuation in arrival time of the packetized voices to the data block of a MAC frame.